

MEMORANDUM

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SUBJECT: 1993 National Estimates of Electrocutions Associated With
Consumer Products

According to data from National Center for Health Statistics (NCHS), total electrocutions in the U.S. have decreased from 880 deaths in 1983 to 550 in 1993 (the most recent year for which data are available), a reduction of 38 percent. Table 1 shows that during this period, the estimated electrocutions related to consumer products decreased from 400 to 210, a reduction of 48 percent. There was a significant downward trend in both total electrocution deaths and consumer product-related deaths for this period.¹ (See Figure 1.) Also, the per capita electrocution death rate has declined. In 1983, estimated consumer product-related electrocutions occurred at a rate of 1.7 per million U.S. population. In 1993, that rate had been reduced to 0.8 per million, a reduction of 53 percent.

Antennas that contacted overhead power lines (17%) were the most frequently reported products involved in electrocutions for 1993. Large appliances such as air conditioners, pumps, and generators (16%) and small appliances such as fans, televisions, and radios (16%) were the second most frequently reported products involved in the electrocutions. Installed home wiring (13%) and power tools (12%) were the third and fourth most frequently reported products involved,

¹The Spearman rank coefficient was used to test for a downward trend in the estimated electrocutions. The correlation statistic supported the hypothesis of a downward trend at the 0.05 significance level.

respectively. (See Table 2.) Lighting equipment, mainly lamps and light fixtures, accounted for 9 percent and ladders that came in contact with overhead power lines accounted for 8 percent. Garden and farm equipment accounted for 5 percent of the electrocutions. Other products involved in electrocutions included pipes, poles, fences, swimming pools, and boat hoists.

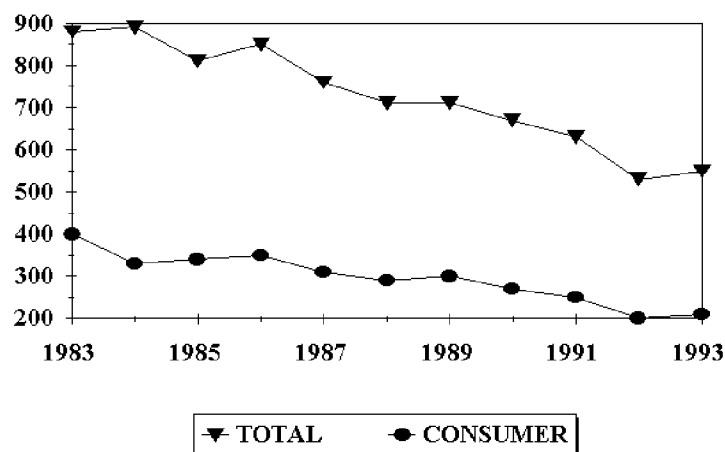
CPSC collects copies of death certificates involving electrocutions and other deaths from individual states. The death certificates that include enough information to identify a related consumer product are coded and maintained in the Death Certificate database (DCRT). Also, CPSC maintains the Injury or Potential Injury Incident database (IPII) which contains data from sources such as letters, telephone calls, newspaper clippings, and reports from consumers, coroners, medical examiners, and fire and police departments. These reports describe deaths, injuries, and "near miss" incidents involving consumer products. Using the DCRT, IPII, NCHS data, the estimated number of deaths was computed. It is noted that the Commission's files identified specific information on almost all of the consumer product-related electrocutions estimated to have occurred during 1993.

Table 1
Electrocutions Related to Consumer Products
and Death Rates Based on U.S. Population, 1983-1993

Year	U.S. Total Electrocutions	Consumer Product Related Electrocutions		Death Rate per Million U.S. Population
		Number	Percent of Total	
1993	550	210	38	0.8
1992	530	200	38	0.8
1991	630	250	40	1.0
1990	670	270	40	1.1
1989	710	300	42	1.2
1988	710	290	41	1.2
1987	760	310	41	1.3
1986	850	350	41	1.5
1985	810	340	42	1.4
1984	890	330	37	1.4
1983	880	400	45	1.7

Source: National Center for Health Statistics, Consumer Product Safety Commission / EHHA

Figure 1
Electrocutions From All Causes and
Consumer Product Related, 1983- 1993



Source: National Center for Health Statistics, Consumer Product Safety Commission / EHHA

Table 2
Electrocutions Involving Consumer Products, 1993

Type of Consumer Product	Actual Number	Estimated Number	Percent
Total Number of Deaths	203	210	100
Large Appliances	32	33	16%
Air Conditioners	11	11	
Refrigerators/Freezers	4	4	
Washing Machines/Dryers	1	1	
Pumps / Generators	10	10	
Electric Furnaces / Water Heaters	3	3	
Ranges/Ovens	3	3	
Ladders	15	16	8%
Power Tools	25	26	12%
Power Drills	10	10	
Power Saws	8	8	
Welding Equipment	7	7	
Lighting Equipment	18	19	9%
Work Lights	7	7	
Lamps, Light Fixtures	11	11	
Installed Household Wiring	26	27	13%
Small Appliances	32	33	16%
Extension Cords	3	3	
Fans	6	6	
Radios, Televisions, Stereos	8	8	
Hair, Hygiene Equipment	3	3	
Microwaves	4	4	
Portable Heaters	3	3	
Other ²	5	5	
Antennas	35	36	17%
Garden/Farm Equipment	10	10	5%
Other Products	10	10	5%
Pipes, Poles, Fences	4	4	
Boat Hoists	4	4	
Swimming Pools	2	2	

Source: U.S. Consumer Product Safety Commission / EHHA

Note: Detail may not add to total due to rounding.

²Includes battery chargers, sewing machines, steam cleaners, and vacuum cleaners.

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